

though very common on the mainland, this species was only encountered on the island in a few wet places in thin coniferous forest.

OSMUNDA CINNAMOMEA L. var. CINNAMOMEA and

OSMUNDA CLAYTONIANA L. both fairly common in wet openings in the forest.

BOTRYCHIUM LUNARIA L., B. MATRICARIFOLIUM A. Braun, and B. SIMPLEX Hitchcock. Many scattered colonies of all three in open meadows, growing with moss, *Iris*, and *Polygonum viviparum*.

BOTRYCHIUM VIRGINIANUM L. Rare. A colony found growing in partial shade in a small clearing in the coniferous forest.

EQUISETUM ARVENSE L. Common in wet meadows.

EQUISETUM PRATENSE Ehrhart. One colony found growing with *E. arvense* in a damp meadow.

EQUISETUM SCIRPOIDES Michx. A colony found growing in tufts on stumps in cleared ground.

EQUISETUM SYLVATICUM L. var. MULTIRAMOSUM Fern. Very common, replacing *E. arvense* in moist areas in coniferous forest.

LYCOPODIUM ANNOTINUM L. Uncommon; collected in man-made clearing in coniferous forest.

LYCOPODIUM CLAVATUM L. and L. LUCIDULUM L. Uncommon in coniferous forest.

LYCOPODIUM OBSCURUM L. Rare. Two small plants were found in coniferous forest.

SELAGINELLA SELAGINOIDES (L.) Link. A good-sized colony was found in an open bog, where the species grew on small stumps in company with *Parnassia* and *Drosera*.

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A NOTE ON ELAPHOGLOSSUM CRINITUM.—A number of years ago during one of my frequent botanizing trips to Cuba I spent some time at the "rest house" of the Hermanos de la Salle high up on the peak of Loma del Gato. This verdant mountain, one of the tallest in Cuba, lies not far from Santiago. Because of the extensive botanical activities of the Brothers of the Colegio de la Salle, both in Santiago and in Havana, its flora is reasonably well known. Especial attention was paid, by several of the noted Cuban botanists, to its extraordinary fern flora, which ranges into the hundreds of species, and includes a remarkable number of endemics.

The entire upper third of Loma del Gato—which means “Hill of the Cat,”—is covered by a dense forest. Constant very high humidity, coupled with frequent heavy rains throughout the year, create conditions which are ideal for the development of ferns. A variety of immense, graceful tree ferns is found here, virtually every tree-trunk is heavily clothed with dozens of different kinds of epiphytic ferns, and the moist ground under the trees is generally a solid sheet of other ferns in almost overwhelming quantities and kinds. In sunny places where the indigenous trees and shrubs have been disturbed, *Gleichenia* and *Dicranopteris* take over in almost impenetrable thickets.

In such a pteridologist's paradise, I felt uncomfortably aware of my failings and wished that I knew more about the intricacies of fern determination. But I did find, among others, one particular species of fern which was known to me, since it is a famous one which has long been prized by connoisseur collectors in all parts of the world. This was the strange Elephant-Ear Fern, *Elaphoglossum crinitum*.

Widely distributed in the West Indies, Mexico, and portions of Central America, this remarkable fern is a common species in the summit forests of Loma del Gato, and has also been found on a few additional peaks in southeastern Cuba, such as Gran Piedra, Pico Turquino, etc. It has, in the past, been known as the type of a separate genus, *Hymenodium*, but Copeland and others consider this to be referable to the polymorphic group *Elaphoglossum*.

The initial specimens of this Elephant-Ear Fern (its very heavy, russet-hairy fronds certainly do look somewhat like pachyderms' ears!) which I found were growing in a habitat which was characteristic of all those encountered. It was perched in regular array on fallen, partially rotting, moss-covered logs in the darkest shaded spots in the forest. Though I found occasional sporelings on the bases of mossy tree-trunks (even those of the lovely *Palma justa*, *Euterpe globosa*), no mature plants were found other than on the fallen and deteriorating logs.

Growing with the *Elaphoglossum*, in considerable profusion, were creeping colonies of the very delicate and delightful *Rhipidopteris peltata*, which has long been one of my personal favorites of all ferns, even though I cannot successfully maintain it here in my Coconut Grove garden.

The hirsute covering of this *Elaphoglossum* varies from russet-brown to almost black, forms of the latter appearing rather as if they were dead, instead of living organisms. The fertile fronds are shorter-stalked than the sterile ones, smaller, and paddle-shaped; they bear a solid mass of sporangia on their undersides and are very distinctive, though seemingly rarely produced in the wild.

According to expert fern-growers, this Elephant-Ear Fern does well in a friable rich compost under high humidity at all times, though over-watering should be avoided. I would assume, from having seen the plants in the wild, that enough water should be given them at the roots to keep them constantly moist, but the mossy logs on which they perch would also afford them adequate drainage even in nature.

Though *Elaphoglossum crinitum* is a spectacular fern which has long been in cultivation, I am interested to find that in D. G. Huttleston's recent valuable "Fern Sources in the United States" (THIS JOURNAL 52: 97-109. July-Sept. 1962), it is not listed. If it is available in this country, I would be most anxious to hear of a source.—ALEX D. HAWKES, *Coconut Grove 33, Florida*.

OBSERVATIONS ON THE SENSITIVE FERN: SUPPLEMENT.—Last year in my paper "Observations on the Sensitive Fern," I asked the question, "What is the critical period during which destruction of vegetative leaves will induce primordia of sporophylls to change their course of development?" (THIS JOURNAL 53: 97. 1963). A simple experimental test of plants in a ten foot square at Pilot Knob indicates that, at least in this case, twenty days is long enough.

On June 16th the large vegetative leaves of the selected area